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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/517,353	03/02/2000	Chad Byron Moore	MRE-9	5133

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EXAMINER

DOAN, JENNIFER

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 06/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/517,353

Applicant(s)

MOORE, CHAD BYRON

Examiner

Jennifer Doan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 12, 14, 15, 20, 21, 23, 26-31 and 36-39 is/are rejected.
- 7) ☒ Claim(s) 9, 11, 13, 16-19, 22, 24, 25 and 32-35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Specification

1. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8, 10, 12, 14, 15, 20, 21, 23, 26-31 and 36-39 are rejected under 35 U.S.C. 102(b) as being anticipated by Cheo (U.S. Patent 3,924,931).

Regarding claims 1, 5, 8, 10, 20, 26-29, 36 and 37, Cheo discloses (Figs. 6 and 7) a fiber for use in an electronic display comprising at least one electrode (32); a lens function (42, 44) designed into a part of the fiber (34); forming a perform including two distinct materials to form the fiber, wherein the lens function is created inside the fiber using a material to form the lens having a different index of refraction than the fiber material (column 5, lines 6-9); further comprising one reflecting region within the fiber or on the fiber surface as shown in as shown in Fig. 7.

Regarding claims 2 and 21, wherein the electrode is a metal wire (column 6, lines 38-41.

Regarding claims 3 and 4, wherein the lens function changes a direction or a focus of the light passing through the fiber (column 4, line 50-column 5, line 5).

Regarding claim 6, wherein the lens function is selected from the group consisting of a convex, concave and a combination of convex and concave shapes as shown in Fig. 6.

Regarding claim 12, wherein the fiber is composed of a material glass and plastic (column 6, lines 36-37).

Regarding claim 14, wherein the lens function corrects for a chromatic aberration (column 4, lines 50-65).

Regarding claims 15, 23 and 31, wherein the electronic display is a multiple view display (column 4, line 50-column 5, line 5).

Regarding claim 30, further (Figs. 6 and 7) comprising a waveguide (34) formed from the two transparent materials such that the waveguide directs light (38) through an aperture created in the fiber.

Regarding claims 38 and 39, Cheo disclose, Figs. 4-7, a method of creating a three-dimensional image in a display having a multiple electrodes (32) and lens (42 and 44) comprising subdividing a voltage that creates the appearance of depth in one pixel location between more than one of the electrodes in the one pixel location such that the appearance of depth is perceived to be between either appearance of depth created by applying the voltage to any one of the electrodes and further dividing the light intensity map in the pixel location between the electrodes as shown in Figs. 4 and 5.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cheo as cited above.

Cheo discloses all the limitations of the claimed invention except Cheo does not disclose the lens function is selected from the group consisting of a binary, a Fresnel and lenticular lenses as recited in claim 7. However, it would have been an obvious matter of design choice to have the lens function with the above shapes, since such a modification would have involved a mere change in the figure of a component. A change in form or shape is generally recognized as being within the level of ordinary skill in the art. *In re Dailey*, 149 USPQ 47 (CCPA 1976).

Allowable Subject Matter

6. Claims 9, 11, 13, 16-19, 22, 24, 25 and 32-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art fails to disclose or reasonably suggest a fiber comprising one absorbing region which acts as a black matrix to separate one part of the fiber from

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another part of the fiber as recited in claims 9 and 11 and defines the source of light exiting the aperture as recited in claim 22; wherein one part of the fiber is colored as recited in claim 13; wherein the display is three-dimensional as recited in claims 16, 24 and 32; and wherein the three-dimensional display is a stereoscopic display as recited in claim 25.

Claims 17-19 and 33-35 are dependent on the objected claims 16 and 32 respectively.

Response to Arguments

7. Applicant's arguments in the remarks, filed 03/10/2003, with respect to the rejection(s) of claim(s) 1-39 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Cheo (U.S. Patent 3,924,931) since Cheo not only discloses a switching function but also teaches the laser beam propagation in the thin film; therefore, Cheo definitely discloses a fiber for use in an electronic display. This action is **NOT** made final.

Conclusion

8. Applicants' arguments with respect to claims 1-39 have been considered but are moot in view of the new ground(s) of rejection. This action is **not** made final.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Huh et al. (U.S. Patent 6,236,799) flat panel display device using

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optical waveguide; Bhagavatula et al. (U.S. Patent 5,984,747) and Moore (U.S. Patent 6,247,987) discloses a plasma displays having fibers.

10. Any inquiry concerning the merits of this communication should be directed to Examiner Jennifer Doan whose telephone number is (703) 308-6179. The examiner can normally be reached on Monday to Thursday from 6:30am to 4:00pm, first Friday off.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick, can be reached on (703) 308-4819. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7724.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

JD

JD

May 15, 2003


AKM ENAYET ULLAH
PRIMARY EXAMINER